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ABSTRACT

Data on the black subsample of Ohio State University's 1981 Longitudinal Surveys Youth Cohort were analyzed to investigate the relationship between attendance at segregated or desegregated high schools and the racial composition of one's subsequent occupational work group. The analysis indicated that: (1) controlling for the effects of other variables, blacks who had attended segregated schools were likely to be in predominantly black occupational work groups, while those who had attended desegregated schools were likely to be in desegregated work settings; (2) the association between school racial composition and racial composition of work group was particularly pronounced in the North; (3) black workers were more likely to be concentrated in low status occupations and in the public sector; and (3) blacks from desegregated schools made fewer racial distinctions about the friendliness of their co-workers and the competence of their supervisors, while those from predominantly black schools tended to perceive desegregated co-worker groups as less friendly and see white supervisors as less competent than black supervisors. It was suggested that social psychological processes have significant effects on minority segregation in institutional settings. (MJL)

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MORE EVIDENCE ON SOCIAL-PSYCHOLOGICAL PROCESSES THAT PERPETUATE MINORITY SEGREGATION: THE RELATIONSHIP OF SCHOOL DESEGREGATION AND EMPLOYMENT SEGREGATION

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More Evidence on Social-Psychological Processes That Perpetuate Minority Segregation: The Relationship of School Desegregation and Employment Desegregation

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The Center

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The Center works through three research programs to achieve its objectives. The School Organization Program investigates how school and classroom organization affects student learning and other outcomes. Current studies focus on parental involvement, microcomputers, use of time in schools, cooperative learning, and other organizational factors. The Education and Work Program examines the relationship between schooling and students' later-life occupational and educational success. Current projects include studies of the competencies required in the workplace, the sources of training and experience that lead to employment, college students' major field choices, and employment of urban minority youth. The Delinquency and School Environments Program researches the problem of crime, violence, vandalism, and disorder in schools and the role that schools play in delinquency. Ongoing studies address the need to develop a strong theory of delinquent behavior while examining school effects on delinquency and evaluating delinquency prevention programs in and outside of schools.

The Center also supports a Fellowships in Education Research program that provides opportunities for talented young researchers to conduct and publish significant research and encourages the participation of women and minorities in research on education.

This report, prepared by the Education and Work Program, examines how attendance in desegregated schooling affects subsequent employment by blacks in desegregated work environments.

Abstract

Data from the black subsample of the recent National Longitudinal Surveys Youth Cohort are used to investigate the effects of school desegregation on subsequent employment desegregation. It is shown that in the North, net of individual differences in sex, age, occupational status and local demographic conditions, blacks from desegregated schools are more likely to be located in desegregated occupational work groups. Moreover, blacks from desegregated school backgrounds make fewer racial distinctions about the friendliness of their co-workers or about the competence of their employment supervisors. In contrast, blacks from segregated schools tend to find desegregated co-worker groups to be less friendly and white supervisors to be less competent. These results are discussed in terms of the gaps in previous evidence on the perpetuation of segregation and in terms of theories of the intervening social-psychological processes that link desegregation across different institutional settings and stages of the life cycle.

A few diverse studies show that minority segregation tends to be perpetuated over stages of the life cycle and across institutional settings (Braddock, 1980; Braddock and McPartland, 1982; Crain, 1970; McPartland and Crain, 1980; McPartland and Braddock, 1981; U.S. Commission on Civil Rights, 1967, Appendix C5). Minorities who grow up in a largely segregated environment are more likely to lead their adult lives in segregated situations. And, at any given age, minorities who are segregated in one institutional sphere--be it in education, residential location, employment or informal social contacts--are also likely to have mostly segregated experiences in other institutional environments.

Although this pattern has consistently emerged from the research, no single data set covers a full range of ages or institutions, and the underlying processes have not been studied well because direct measures of structural or social-psychological elements have not been available. This paper reviews the previous limited evidence on the perpetuation of minority segregation, presents new results from a recent black youth national cohort, and discusses the results in terms of alternative theories and the needs for further research.

Previous Research on the Perpetuation of Segregation

Research on the perpetuation of segregation requires data from longitudinal surveys of individuals measuring desegregation at different stages of the life cycle and across

different institutional settings. Previous research has been limited by the scarcity of such data. Nevertheless, a few data bases provide relevant coverage, including a retrospective study of adults conducted in the late 1960's, a longitudinal study of high school graduates begun in 1972 and followed through 1979, and a nine-year follow-up study in 1980 of freshmen who entered college in 1971. Each of these data sets has been used to investigate some aspects of the perpetuation of segregation across specific institutional settings.

The studies based on these over-time data sets typically estimate the relationship between the extent of desegregation experienced in one institution earlier in life and the extent of desegregation experienced in another institution later in life, to argue that earlier experiences set in motion processes that contribute to later experiences. The studies usually do not directly measure and evaluate the intervening processes themselves, although the authors speculate on the processes that may be at work.

The original research on the perpetuation of segregation was conducted over fifteen years ago. It consisted of a retrospective study of 1624 black and 1400 white adults, most of whom had been out of school for an average of about 15 years at the time of the survey (U.S. Commission on Civil Rights, 1967, Appendix C5; Crain, 1970; Crain and Weisman, 1972). Besides the historical time limitations of this

study, the black adult sample was restricted to residents of the North and West. Nevertheless, this research broke new ground in studying the long-term effects of school desegregation and in theorizing about important intervening causal mechanisms that may break down barriers that perpetuate segregation, and it remains one of the few empirical studies on these topics.

Results from these data indicated that school desegregation had positive effects for blacks on subsequent college and occupational attainments. Also, both blacks and whites who attended desegregated schools were more likely to function in desegregated environments in later life. As adults, they more frequently lived in desegregated neighborhoods, had children who attended desegregated schools, and had close friends of the other race than did adults of both races who had attended segregated schools (U.S. Commision on Civil Rights, 1967). There is also some evidence that blacks from desegregated situations had a stronger sense that occupational opportunities are available to them, more confidence in their ability to succeed in interracial situations, more consideration for jobs which are not traditionally held by blacks, and more access to informal sources of information about employment opportunities, all of which may be important for adult occupational success (Crain and Weisman, 1972, Ch. 10).

The recent research on more contemporary samples includes

two studies of the relationship between black attendance at desegregated elementary-secondary schools and desegregated colleges (Braddock, 1980; Braddock and McPartland, 1982), and a study from a sample of college-bound blacks of the link between having white work associates and white friends eight years after college and their earlier experiences in desegregated secondary schools and residential neighborhoods (Astin, 1982; Green, 1981; 1982).

The evidence on the effects of earlier school desegregation on attending desegregated colleges is drawn from studies that included statistical controls on the students' region, social class background, college credentials (high school grades and test scores), and residential proximity to alternative colleges (Braddock and McPartland, 1982; see also Braddock, 1980, for a separate study of the same topic in two southern metropolitan areas). Using national longitudinal data from over 3000 black students who graduated from high school, Braddock and McPartland (1982) found both direct and indirect effects of earlier school desegregation on attendance at desegregated colleges.

In the South, where a large number of both predominantly black and predominantly white two-year and four-year colleges are available, elementary-secondary school desegregation directly affects black student enrollment at desegregated colleges. The rate of black student attendance at <u>some</u> college was about the same for those from segregated or

desegregated elementary and secondary schools, but the choice of a desegregated college was significantly higher for those with earlier experiences in desegregated schools before high school graduation. This effect on the choice of a desegregated college was especially strong for students entering four-year institutions.

In the North, both majority black and majority white two-year colleges are widely distributed, but almost all four-year institutions are majority white. A direct effect of early desegregation was found among northern black students who entered two-year colleges--the enrollment rates at desegregated institutions were significantly higher for those who came from desegregated elementary and secondary schools. Direct effects could not be assessed for four-year college students, because almost all four-year institutions in the North are desegregated--there are few segregated options for black four-year students to choose. However, studies of northern students did reveal a significant positive impact of early school desegregation on whether a black high school graduate enrolled at all in a four-year college. Black students from northern desegregated elementary and secondary schools were significantly more likely than black students from segregated schools to attend some four-year college, after controlling for family background and college qualifications (see also Crain and Mahard, 1978). Thus, desegregated elementary and secondary schools are creating a greater proportion of blacks who enroll in desegregated col-

leges than are created by segregated elementary and secondary schools. In other words, there is an indirect effect for northern blacks of early school desegregation on attendance at desegregated four-year colleges, due to the direct positive influence on enrollment at some northern four-year college.

Overall, impressive evidence with adequate controls on alternative factors is provided for the perpetuation of segregation from elementary-secondary schools to college. Earlier desegregated schooling has a sizeable direct effect on black attendance at desegregated two-year and four-year colleges in the South and on black attendance at desegregated two-year colleges in the North, in addition to its major indirect effect on attendance at desegregated northern four-year colleges.

Recent previous evidence on how school desegregation affects occupational desegregation for blacks is provided by a study restricted to a black college-bound sample. The study used follow-up data collected in 1980 from a national sample of blacks who had been college freshman in 1971 (Green, 1981; 1982; Astin, 1982). In the 1980 follow-up survey, respondents were asked to retrospectively report the racial composition of the high school they had attended and the racial composition of their residential neighborhood at the time, as well as the racial composition of their present co-workers and their present informal friendship groups.

Analyses which statistically controlled on age, sex, and parental socio-economic status found evidence of the perpetuation of segregation. Blacks who had white work associates and white friends as adults were shown to be significantly less likely to have attended a minority (segregated) high school or to have lived in a minority (segregated) neighborhood when they were growing up. Each of these earlier desegregation experiences, in high school or in neighborhoods, had an independent effect from the other on the racial composition of adult friendship and co-worker groups. The author reports that they could uncover no systematic non-response bias in the large black college-bound sample being studied (N=1400), even though only 10 percent of the original black sample of college freshmen was contacted in the follow-up survey. In spite of this concern, and the fact that the study is restricted to college-bound blacks, the research provides a useful piece of consistent evidence that powerful forces operate to perpetuate segregation across institutions and stages of the life cycle.

None of the recent studies of the effects for blacks of early desegregation on college desegregation and on occupational desegregation were able to measure and study the intervening processes which may account for the reported relationships between the racial composition of different life cycle periods and institutional settings of blacks. These data sets did not include social-psychological mea-

sures, such as those used in the original research from the 1960's, which could help to illuminate the processes. For better evidence on the perpetuation of segregation, we need studies of adult employment and social groups on more representative samples (that go beyond the college-bound sample used in recent studies) and that include direct evidence that early desegregation influences blacks' sense of opportunity, self-confidence and coping skills in interracial settings. Some new data from a contemporary sample of black youth provide over-time measurements of school and employment desegregation together with other measures of blacks' personal assessments of interracial situations.

Further Analyses of Segregation Perpetuation

The data for this analysis are based on the recent National Longitudinal Surveys Youth Cohort (Ohio State University, 1981). The target population for this survey consisted of males and females from five ethnic and class homogeneous subgroups between the ages of 14 and 21 on January 1, 1979. With the exception of individuals on active military duty, sample selection was accomplished through a multistage, stratified area probability sample of dwelling units and group quarter units.

The 1979 youth survey was conducted between late January and mid-August 1979 and followed up with subsequent interviews one and two years later. A total of 12,686 persons were interviewed and followed up. A breakdown of the sub-

samples include approximately 2,000 male and female Hispanics, 3,000 male and female blacks, 1,600 non-Hispanic, non-Black economically disadvantaged males and females, 4,900 non-Hispanic, non-Black males and females and approximately 1,300 male and female military personnel. The present analysis is based on the subsample of blacks (472 females and 602 males) who reported being employed either full- or part-time at the time of the 1980 survey. <1> The NLS Youth Cohort Survey provides especially rich and detailed individual respondent data for examining factors affecting the school-to-work transition. For the present analysis we have also merged selected local demographic data with the individual NLS Youth respondent files. These data--region and community racial composition--are from the Parnes micro-data tapes, which are based on tabulations from the 1972 and 1977 County and City Data Books.

The variables examined in this study are operationalized as follows:

Age - is the respondents' self-reported age at the time of the 1980 survey.

Sex - Codes: 1 = Male; 0 = Female.

Employment Sector - is based on respondents' self-reports of their current employment context at the time of the 1980 survey. Codes: 1 = Public employment; 0 = Private employment.

Occupational Level - is based on respondents' self-reports of the type of job held at the time of the 1980 survey.

Codes: 9 = Professional; 8 = Managerial; 7 = Sales; 6 = Clerical; 5 = Crafts; 4 = Operatives; 3 = Service Workers; 2 = Laborers; 1 = Private Household Workers.

High School Racial Composition - is based on information taken from a school survey. Range: 0 - 100 percent black.

Community Racial Compositon - is based on the racial composition of the county of the respondents' residence at the time of the 1980 survey. Range: 0- 100 percent black.

Race of Co-workers - is based on respondents' self-reports of the racial composition of their co-worker group at the time of the 1980 survey. The measure employed here is computed as the ratio of black workers to total workers. Range: 0 - 100 percent black.

Co-worker Friendliness - is based on respondents' self-reports to an item taken from the 1980 instrument which asked "Is it true that your co-workers are friendly?" Response categories range from 1 = Not at all true to 4 = Very true.

Supervisor Competence is based on respondents' self-reports to an item taken from the 1980 survey instrument which asked "Is it true that your supervisor is competent in doing the job?" Response categories range from 1 = Not at all true to 4 = Very true.

School and Occupational Segregation

Table 1 shows, for young black full-time and part-time workers, the percent black of their work associates by occupational level, high school racial composition and sex.

Table 1 about here

The data in Table 1 indicate that among both white-collar and blue-collar full-time workers, black young adults who attended majority black high schools are less likely to have white work associates than are their counterparts from majority white high schools, although the latter are somewhat less likely to hold white-collar jobs. A similar pattern holds for both males and females, although the relationship is weak for black women in white-collar jobs. This relationship is also consistent for part-time workers. However, the small sample of part-time workers does not permit reliable estimates for some population subgroups, i.e., black males in white-collar jobs. Nevertheless, these data indicate that part-time employed black graduates of majority black high schools are also considerably more likely to have mostly black work associates than are black graduates of majority white high schools regardless of the level of the jobs held. Thus, we see that school and occupational segregation are related across gender groups and labor-market sectors. However, this relationship is obviously complex and requires more sophisticated and detailed multivariate analyses to determine if segregation is indeed a self-perpetuating process. A multiple regression analysis was performed to estimate the direct or independent effect of school segregation on occupational segregation net of other

factors--sex, age, occupational status, and public vs. private sector employment--that have been shown in prior research to be important correlates of labor force segregation. Intercorrelations, means, and standard deviations for all variables in the regression model are presented separately by region <2> in Table 2 for full-time workers. <3>

Table 2 about here

The results of our multiple regression analysis predicting racial composition-- percent black--of co-workers for the basic model are presented in Table 3 by region. Both standardized and unstandardized regression coefficients are presented in order to facilitate within- and between-group comparisons.

Table 3 about here

The standardized regression coefficients and their associated F-values shown in Table 3 indicate that in both the North (b=.345) and the South (b=.166), high school racial composition is the most powerful determinant of occupational segregation--co-worker racial composition--among the set of predictors in our basic model. That is, having attended a segregated high school, net of the influence of sex, age, occupational status,and employment sector, exerts a rather strong and statistically significant influence on reducing

the probability of black youth seeking and/or finding employment in desegregated work environments. Although this relationship holds across regions it is considerably stronger in the North than the South, as the unstandardized regression coefficients (B=.359 and B=.199, respectively) indicate. In the North, the direct effect of high school racial composition on co-worker racial composition, in fact, exceeds the combined net effects of sex, age, employment sector and occupational level. In the South, the relative effect of high school racial composition is more comparable in magnitude to the effects of occupational level (b= -.116) and sex (b= .110). Nevertheless, high school racial composition exhibits the only statistically significant effect on co-worker racial composition among the variables in our basic model in both the North and the South.

As might be expected, occupational segregation--percent black of co-workers --across regions is inversely related to occupational level and positively related to public sector employment. Or, put differently, black workers are more likely to be concentrated in low status occupations than in high status occupations and more likely to be employed in the public sector rather than the private sector. The net effects of sex and age on co-worker racial composition are small and statistically insignificant in both regions; however, the direction of the coefficients suggests that males and younger workers are less likely to have white work associates.

Overall, the basic model accounts for only a modest proportion of the variance in labor force racial composition. However, the total variance explained by our model in the North (Multiple R2=.149) is more than double the variance accounted for in the South (Multiple R2=.055). Despite the fact that high school racial composition proved to be the most powerful and only statistically significant predictor in both regions, the large proportion of variance left unaccounted for suggests the need to consider other factors and alternative models.

School, Community and Occupational Segregation

There are alternative explanations for the observed relationships of desegregation across institutions or stages of the life cycle that do not require any change in attitudes due to early desegregation experiences. Indeed, there is a possibility that the observed desegregation-perpetuation relationships are spuriously created by a common ecological factor that has nothing to do with any individual socialization process. Because localities with different racial population mixes will produce different random chances of interracial contact (e.g. blacks in mostly white communities have a greater random chance of encountering whites than blacks in mostly black communities), we must consider that the individual relationships we observed of desegregation in schools and work settings could be produced by local community differences in the random probabilities for cross-race

contact. Community contrasts in the random probabilities for cross-race contact would be consistent for different institutional settings and for different age groups, and thus could spuriously underly the individual relationships we have observed. Besides the community differences in random probabilities for cross-race contact, there is evidence that local communities differ in political and structural factors that influence institutional desegregation (see, for example, Becker, 1982; Center for National Policy Review, 1980; Orfield, 1980; Pearce, 1980). Such community ecological factors could also produce the observed relationships without the influence of any individual socialization processes.

To deal with the possibility that observed relationships at the individual level between different measures of desegregation are simply a spurious consequence of demographic features of different communities, we have elaborated our basic model to statistically control for the racial composition of the community before estimating the relationship between school and labor force segregation.

The results of our multiple regression analysis predicting racial composition--percent black--of co-workers for the elaborated model are presented in Table 4 by region of residence.

Table 4 about here

In the North, the standardized betas in the top panel of Table 4 show that high school racial composition is again the largest single and only statistically significant predictor of occupational segregation, even with the addition of demographic controls for county percent black. Indeed, comparing the total association (r = .328) and the standardized regression coefficient (b = .295), we find that roughly ninety percent of the relationship between school and occupational segregation among northern residents is direct and non-spurious in our elaborated model. In contrast, only about sixty percent of the total association (r = .204) between community/county racial composition and occupational segregation is direct (b = .123) and non-spurious in this model.

The bottom panel of Table 4 shows a quite different pattern for southern residents, however. Here we see that community--county--rather than school racial composition is the major determinant of occupational segregation. In the South, the effect on occupational segregation of community racial composition (b=.196) is nearly four times greater than that of high school racial composition (b=.050). Moreover, eighty-seven percent of the zero-order relationship between community and occupational segregation is direct and nonspurious as compared to only one-third of the zero-order relationship between school and occupational segregation. There are two apparent explanations for this reversal in the pattern of school/community and occupational segregation in

the South. First, in the South, at the bivariate level the zero-order correlation between school and occupational segregation (r=.151) is smaller than the zero-order correlation between community and occupational segregation (r=.224) while the reverse is true in the North (r=.328 and r =.204, respectively). Second, the zero-order correlation between school and community segregation is stronger in the South (r=.60) than in the North (r=.42). Thus, the significant but weak bivariate relationship between school and occupational segregation in the South is washed away by the strong association in the South between school and community segregation. This combination of factors makes it difficult to disentangle the unique and joint effects of school and community segregation on occupational segregation in the South.

The pattern of results among the other variables in the model is the same in the South as in the North. Across regions, occupational segregation is inversely related to age and occupational level and positively related to maleness and public sector employment. Although none of these variables exhibits significant direct effects on occupational segregation, they do indicate that male, younger, public sector and lower status black workers are less likely to have white work associates. Again, however, even the elaborated model accounted for only a modest proportion of the variance in labor force racial composition in both regions, with the North (Multiple R2=.161) twice as large as the South (Multiple R2=.079).

The evidence suggests that, for Northern blacks, the racial composition of co-workers is strongly associated with the racial composition of the high school attended. That is, net of other factors including the racial demography of the local community, blacks from majority black high schools are likely to have a preponderance of black work associates while blacks from majority white high schools are likely to have a preponderance of white work associates. Among southern blacks the evidence is less clear, but it does suggest that occupational segregation in this region may be more a consequence of community rather than school segregation, although the low explanatory power of the model suggests the potential importance of other unmeasured factors (e.g., regional labor forces and industry differences, or differential employment opportunities for black workers).

Social-Psychological Implications of Racial Segregation

Racial integration in any form has both quantitative and qualitative dimensions. Studies of integration and assimilation in America must take into account not only racial distributions in particular contexts or environments but also the qualitative nature of intergroup contacts and experiences in those environments. To examine some of the qualitative aspects of school and labor force segregation, we present some further evidence on friendliness among co-workers and evaluations of supervisors as reported by young black workers from majority black and majority white high

schools.

Table 5 presents mean differences in perceptions of co-worker friendliness by race of co-worker and high school racial composition. The data show that although most respondents rate their co-workers as "friendly," some substantive differences among blacks appear to be associated with school and labor force segregation. Blacks who attended majority black high schools perceive their co-workers in majority white settings (X=3.44) as somewhat less friendly than their co-workers in majority black (X=3.51) settings, while blacks who attended majority white high schools show only trivial differences in perceptions of co-worker friendliness across majority black (X=3.51) and majority white (X=3.53) work groups. Moreover, perceptions of co-workers' friendliness do not differ by high school racial composition among workers in majority black settings, but blacks in majority white work settings who attended majority black high schools (X=3.44) perceive their co-workers as less friendly than do blacks who attended majority white high schools (X=3.53). Thus, high school desegregation appears to promote more positive perceptions and social contacts among blacks and whites in racially heterogeneous work groups.

Table 6 presents mean differences in black workers' evaluations of supervisor competence by their supervisors' race and the respondents' high school racial composition. The

pattern is similar to that observed for perceptions of co-worker friendliness. Most workers rate their supervisors as competent, but blacks who attended majority black high schools evaluate their white supervisors (X=3.40) substantially lower than they rate their black supervisors (X=3.63). The same pattern holds for blacks who attended majority white schools (X=3.52 and X=3.63, for white and black supervisors respectively), but the difference is considerably smaller. Table 6 also shows that blacks who attended majority black high schools (X=3.63) rate their black supervisors somewhat higher than blacks who attended majority white high schools (X=3.56), while blacks who attended majority black high schools (X=3.40) rated their white supervisors considerably lower than did blacks who attended majority white high schools (X=3.52). This finding suggests that the experiencing high school desegregation may reduce the degree of racial influence on cross-race job-related or task-related evaluations which have both subjective and objective components.

Discussion

To assess the available evidence on the processes that perpetuate segregation and to consider the future data and research that would be most helpful to better understanding, it is useful to contrast different causal explanations for the consistent relationships found for blacks between the racial composition of their social environments early in

life and later in life.

We wish to contrast (a) social-psychological processes with (b) factors deriving from the racial demography of local areas that could produce the observed relationships without any actual social-psychological changes that may derive from earlier life experiences in desegregated environments.

Social-psychological processes are based on changes in individual attitudes concerning contact with others who are not members of one's own racial group. For example, social-psychological barriers among blacks to seeking or sustaining memberships in desegregated groups would be greater for those individuals who unrealistically expect hostile reactions from whites or who have less confidence that they can function successfully in an interracial situation, or who have greater difficulty dealing with the strains that may accompany interracial contacts. If earlier experiences of blacks in desegregated settings help to break down these social-psychological barriers--by creating more accurate and positive expectations of white reactions, by building confidence in one's ability to succeed in racially mixed environments, or by providing practice with dealing with the strains of cross-racial contacts--then one would expect less avoidance or withdrawal from desegregated experiences in later life. Similarly, social-psychological barriers among white adults to interracial contact may be bro-

ken down by experiences in earlier life in cross-race situations. For example, if cross-race contacts in desegregated schools reduce white students' negative racial stereotypes and fears of hostile reactions in interracial situations, then these white students as adults will be less resistent to blacks being admitted into co-worker and friendship groups. Recent tabulations of racial attitude questions from national surveys of black and white students do suggest that school desegregation does create more positive reactions, among both blacks and whites, to future interracial situations (Scott and McPartland, 1982).

However, it would be helpful to the argument that social psychological processes are operative to show in communities with <u>similar</u> random probabilities for interracial contact that black <u>adults</u> who actually have more desegregated experiences (in job and friendship groups) had also presviously experienced more desegregation (in schools or neighborhoods) <u>earlier</u> in life. The evidence in this paper suggests that both early school desegregation experiences and current community desegregaton patterns promote adult desegregation in work environments, with school desegregation showing a greater impact than community desegregation, particularly among northern blacks where the relationship between school and community desegregation is less confounded. Thus, it appears that the inferred social-psychological processes that perpetuate minority segregation across institutional settings are not artifactual, but are indeed outcomes of

cross-race experiences in the varied institutional settings.

In addition, the direct measurement and evaluation of key intervening elements helps to substantiate and clarify the argument for causative social-psychological factors that intervene in the processes which perpetuate segregation. One example of direct assessments of social-psychological factors is offered in our results. We showed that blacks from desegregated school backgrounds make slightly fewer racial distinctions about the friendliness of their co-workers and competence of their employment supervisors. We showed, in contrast, that blacks from segregated schools perceived desegregated co-worker groups to be slightly less friendly than majority black co-worker groups and viewed white supervisors as slightly less competent than black supervisors. Although these contrasts are not large in size, they directly suggest that early desegregated experiences create a different attitudinal basis among blacks that, in part, produces or sustains desegregation in adult life. We need other data that directly examine social-psychological factors that accompany the perpetuation of segregation or that create links between desegregation at different stages of the life cycle.

Evidence is slowly accumulating on the processes that perpetuate segregation as data covering different population subgroups and different institutional settings are analyzed on this topic. This paper adds another consistent piece to

the previous evidence. Improved evidence on these processes will be provided by new empirical studies now being conducted to enhance major data sets, such as the NCES National Longitudinal Survey of 1972, with better measures of adult desegregation. We also need research to examine the perpetuation of segregation and its underlying mechanisms among whites as well as among other minority populations, and to consider long and short range financial as well as social and psychic costs and benefits which may be associated with participation in racially heterogenous environments.

Footnotes

1. As might be expected, given the relatively young age of this sample, more than half of the respondents were outside the civilian labor force at the time of the 1980 follow-up (26% still in school; 8% on active military duty; 5% keeping house; 20% unemployed; and 5% unable to work or involved in other activities).

2. Previous research examining the long-term effects of school desegregation have often shown different outcomes for blacks in the North and the South (Crain and Mahard, 1978; Braddock and McPartland, 1982). In preliminary tests of an additive model we found a statistically significant interaction of region x high school racial composition ($F=8.432$; $p<.01$) on occupational segregation. Therefore we will examine parallel regression models for the North and the South.

3. Despite the similarities observed in Table 2 between part-time and full-time workers in the relationship between school and occupational segregation, we must caution that our sample of part-time workers are younger (approximately 2 years), more likely to still be in school and less likely to have embarked on a permanent career path at the time of the survey. For these reasons it seems

important that part-time and full-time workers not be combined into a single group. Unfortunately, however, the small sample size of part-time workers makes independent parallel analyses of this group impractical. Nevertheless we should note that preliminary multiple regression results performed on this group showed a pattern quite similar to that reported for full-time workers.

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Table 1. Racial Composition (Percent Black) of Co-Workers by Occupational Level, High School Racial Composition, Sex and Work Status (N=497)

Occupational Level[a]	High School Racial Composition: Majority Black $\bar{X}$	Majority Black S.D.	Majority White $\bar{X}$	Majority White S.D.
WHITE COLLAR				
Male				
Full-Time	68.60 (22)	34.37	39.44 (15)	27.92
Part-Time	--[b]	--	--	--
Female				
Full-Time	45.49 (38)	33.71	41.67 (42)	35.90
Part-Time	51.15 (16)	30.33	32.85 (19)	27.23
BLUE COLLAR				
Male				
Full-Time	57.18 (62)	36.26	46.86 (80)	37.35
Part-Time	64.14 (37)	36.32	58.21 (35)	40.55
Female				
Full-Time	64.32 (22)	34.47	50.44 (38)	32.58
Part-Time	61.35 (24)	34.26	50.01 (19)	35.03

[a] white-collar = professional, managerial, sales and clerical
blue-collar = crafts, operatives, laborers, service and private household

[b] -- cells with fewer than ten cases have been omitted.

Table 2. Intercorrelations, Means and Standard Deviations for All Variables by Region (Full-Time Workers)

	Variables	1	2	3	4	5	6	7	$\bar{X}$	S.D.
(1)	Sex		-.11	-.01	-.17	-.07	-.24	.03	.59	.49
(2)	Age	-.05		.14	-.01	.04	-.02	-.03	20.28	1.66
(3)	H.S. % Black	.04	.06		.42	-.09	.02	.33	49.80	32.61
(4)	County % Black	.16	.07	.60		-.13	.13	.20	16.50	10.10
(5)	Employment Sector	-.01	.04	-.10	-.05		-.05	.11	.17	.38
(6)	Occupational Level	-.09	.09	.09	.07	.10		-.13	4.58	1.83
(7)	Co-Worker % Black	.13	-.03	.15	.22	.04	-.11		42.31	33.85
	$\bar{X}$	.59	20.24	49.15	30.76	.16	4.31	56.94		
	S.D.	.49	1.59	29.54	16.92	.37	1.79	35.52		

[a]Northern workers above diagonal (N=199); Southern workers below diagonal (N=290)

Table 3. Regression Results from Basic Model Predicting Racial Composition (Percent Black) of Co-Workers by Region of Residence (Full-Time Employed)

	r	b	B	F-Statistic
NORTH (N=199)				
Sex	.030	.003	.211	.001
Age	-.035	-.049	-.991	.332
H.S. % Black	.328	.345	.359	16.394***
Employment Sector	.114	.143	12.700	2.782
Occupational Level	-.132	-.134	-2.476	2.333
Multiple R^2 =	.149			
SOUTH (N=290)				
Sex	.128	.110	7.905	2.447
Age	-.029	-.027	-.595	.144
H.S. % Black	.151	.166	.199	5.532*
Employment Sector	.044	.074	7.129	1.093
Occupational Level	-.106	-.116	-2.299	2.676
Multiple R^2 =	.055			

*$p < .05$

**$p < .01$

***$p < .001$

Table 4. Regression Results from Elaborated Model Predicting Racial Composition (Percent Black) of Co-Workers by Region of Residence (Full-Time Employed)

	r	b	B	F-Statistic
NORTH (N=199)				
Sex	.030	.023	1.576	.065
Age	-.035	-.046	-.930	.285
H.S. % Black	.328	.295	.306	9.813**
County % Black	.204	.123	.041	1.634
Employment Sector	.114	.155	13.811	3.265
Occupational Level	-.132	-.144	-2.648	2.664
Multiple R^2 =	.161			
SOUTH (N=290)				
Sex	.128	.082	5.936	1.365
Age	-.029	-.034	-.761	.241
H.S. % Black	.151	.050	.060	.328
County % Black	.224	.196	.041	4.971*
Employment Sector	.044	.072	7.005	1.076
Occupational Level	-.106	-.121	-2.405	2.987
Multiple R^2 =	.079			

*$p < .05$

**$p < .01$

Table 5. Perceptions of Co-Worker Friendliness by Race of Co-Worker and Racial Composition of High School[a,b]

High School Racial Composition	Race of Co-Workers: Majority Black		Race of Co-Workers: Majority White	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.
Majority Black	3.51 (90)	.71	3.44 (55)	.74
Majority White	3.51 (87)	.71	3.53 (90)	.62

[a] Includes only those reporting full-time employment at time of survey. (N's in parentheses)

[b] 1 = co-workers "not at all" friendly
2 = co-workers "not too" friendly
3 = co-workers "somewhat" friendly
4 = co-workers "very" friendly

Table 6. Black Workers' Evaluations of Supervisors' Competence by Supervisors' Race and High School Racial Composition [a,b]

High School Racial Composition	Race of Supervisor: Black $\bar{X}$	Black S.D.	White $\bar{X}$	White S.D.
Majority Black	3.63 (52)	.56	3.40 (90)	.76
Majority White	3.56 (39)	.75	3.52 (137)	.70

[a] Includes only those reporting full-time employment at time of survey.

[b] 1 = supervisor "not at all" competent in doing the job
2 = supervisor "not too" competent in doing the job
3 = supervisor "somewhat" competent in doing the job
4 = supervisor "very" competent in doing the job